Non-wood Forest Products (NWFP) and Food

10<sup>th</sup>-11<sup>th</sup> October 2011

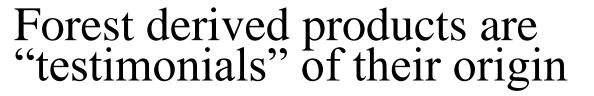
Seinäjoki (Finland)

# New Paths to market Traditional and Innovated NWFPs on Italia Mountain Areas

authors:

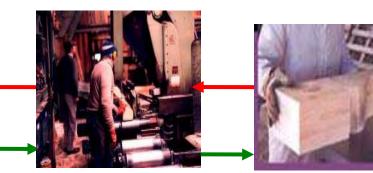
Antonio Brunori<sup>1</sup>, Gian Antonio Battistel<sup>2</sup>

<sup>1</sup>PEFC-Italia; <sup>2</sup>Fondazione Edmund Mach





Forest management



Wood Working Companies

Traders and Selling Companies







Final products



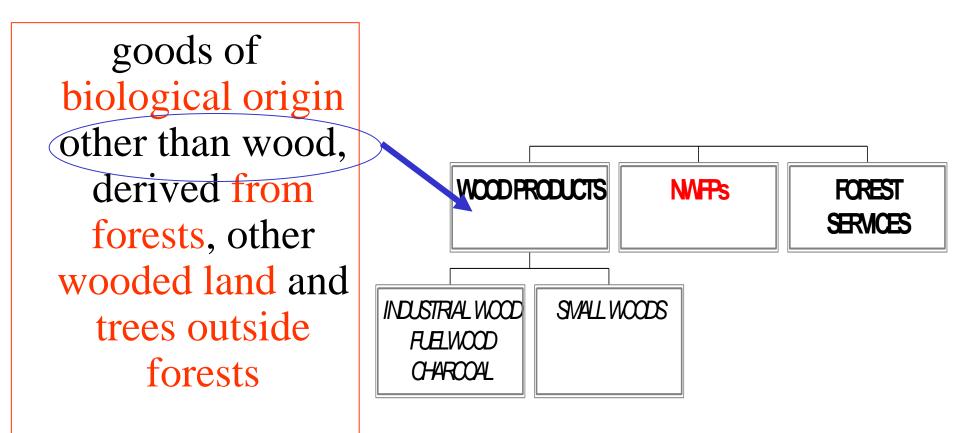




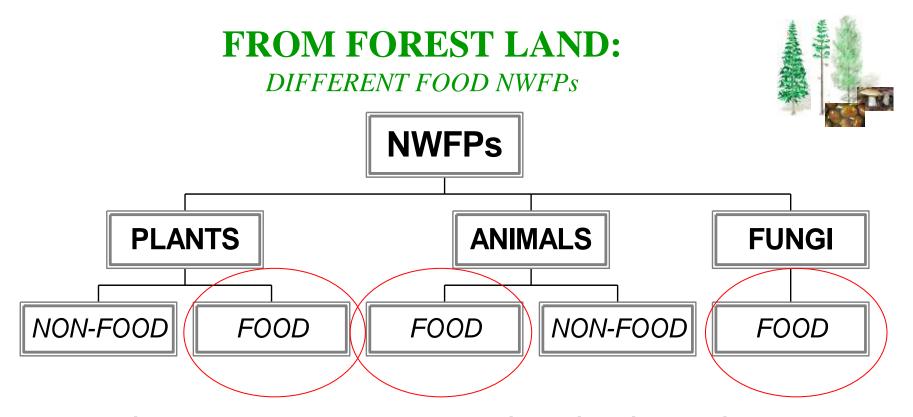








# **NWFPs and F.A.O.'s DEFINITION**



i.e.:, moos, cones, resins, bark, cork, Christmas trees, foliage, fodder, game, wild honey, fruits, berries, nuts, maple sap, mushrooms, truffles, hide, horns, ...

# **RAW NWFPs in ITALY**

(source: ISTAT Statistica Forestale 1955 and Annuario, n° 49 - 2006)



1		٠	
	<b>i</b> NO VALID STATISTICS FOR	PROCESSED NWFPs	

	from forest	from forest and other wooded land		
	1949-50 ton	1949-50 ton	2002 ton	
CHESTNUTS	228427	258490,2	55115,7	
HAZELNUTS	1311,30	28838,3	45728,2	
ACORN	62793,20	112542,2	3513,9	
MUSHROOM	3524,70	4759,9	2112,6	
TRUFFLES		30,4	187,5	
PINE NUTS		3243,0	3433,2	
MANNA		88,3		
CORK		12816,5	11118,4	
RESIN		738,4		
BARK FOR TANNING		4030,1		
LEAF AND TWIGS FOR TANNING		551,3		
STRAWBERRIES	478,80	503,9	53,1	
RASPBERRIES	438,20	494,3	46,2	
BLUEBERRIES	367,60	367,6	209,5	
"CORNIOLE" fruits of Cornus mas	59,90	59,9		
JUNIPERUS BERRIES	678,80	678,8		
"CORBEZZOLI" fruits of Arbutus unedo	194,30	194,3		
"FAGGIOLA" fruits of Fagus sylvatica	120,10	120,1		
MEDICINAL and AROMATIC PLANTS	9345,00	9345,0		

# **RAW NWFPs in TRENTINO**

(source: PAT-Servizio Statistica, 2008: La produzione lorda vendibile dell'agricoltura e della silvicoltura in provincia di Trento nel 2005)



TAB. 6.1A - PRODUZIONE LORDA VENDIBILE DELLA SILVICOLTURA (2003 - 2004 - 2005) Valori a prezzi correnti Gross Total Annual Value

Mushroom and other fruits from forest	2003	2004	2005
Prodotti dei boschi	1.292.664,13 🗲	1.983.358,55 🗲	6.779.691,00 €
Legname da opera	24.832.887,86	17.452.660,99	20.837.820,36
Legna da ardere	5.152.582,77	5.130.013,80	6.364.426,00
TOTALE	31.278.134,76	24.566.033,34	33.981.937,36

TAB. 6.1B - COMPOSIZIONE PERCENTUALE DELLA PRODUZIONE LORDA VENDIBILE DELLA SILVICOLTURA (2003 - 2004 - 2005)

	2003	2004	2005
Prodotti dei boschi	4,13 <mark>%</mark>	8,07 %	19,95 <mark>%</mark>
Legname da opera	79,39	71,04	61,32
Legna da ardere	16,47	20,88	18,73
TOTALE	100,00	100,00	100,00

8% is the contribution of NWFPs to Total Economic Value as to forests in Trentino (source: I. Goio, G. Gios, 2005)

# **RAW NWFPs: ORIGIN, PRICE and PLACEMENT**







Cantharellus lutescens 22,50 €/kg

# **PROCESSED NWFPs: ORIGIN (SFM???, wild???** country), PRICE and PLACEMENT

FOOD

**SUPERMARKET** 



# uice of wild bluberry

- 60



**FAIR** 

# essential oil



Smoked sausages of **Roe Deer**, hamois **Red Deer** Wild Boan

**FAIR** 





# **NWFPs PROMOTION (LABELLING):**

where is the link to SFM (use and abuse of label "forest" "wild"?



# Wild berries?

#### Organic wild berries? Or Organic cultivated berries?









# **NWFPs PROMOTION (LABELLING):**

where is the link to SFM (use and abuse of label "forest"?)







ISO 9001: berries from forest?



Pine Nuts: certification of pesticides residues and traceability



Beer from chestnut P.G.I.

### The "BELTAINE" Beer:

how to use a Brewery integrating traditional Chestnut Cultivation with different Markets linked to "ethnographic path" and spa





### **Törggele time:**

how to integrate roasted chestnuts into autumnal typal fresh and processed products; a way to extend the tourism season





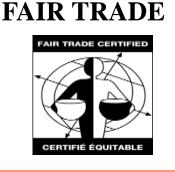
Autumn walks with friends and calling in at mountain farmhouses or inns for refreshment - called Törggelen'- is a favourite traditional activity in South Tyrol. The 'Nuien' (new wine made from grapes which a couple of weeks before were still in the vineyard) plays an important part, along with traditional dishes including 'Speck' (cured, cold smoked bacon), home made sausages with Sauerkraut or red cabbage, roast chestnuts followed by home made pastries, and much more. Törggelen' is a delight for all lovers of genuine food and drink, especially when enjoyed outside in the warm autumn sunshine from October to mid November.

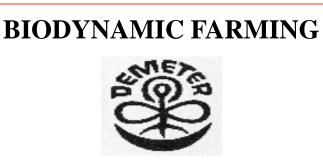
# On the left you will find informations on mountain restaurants offering snacks and new wine, mountain refuges and cable cars.

# **NWFPs and QUALITY MARKS:**

no declaration on SFM origin/promotion











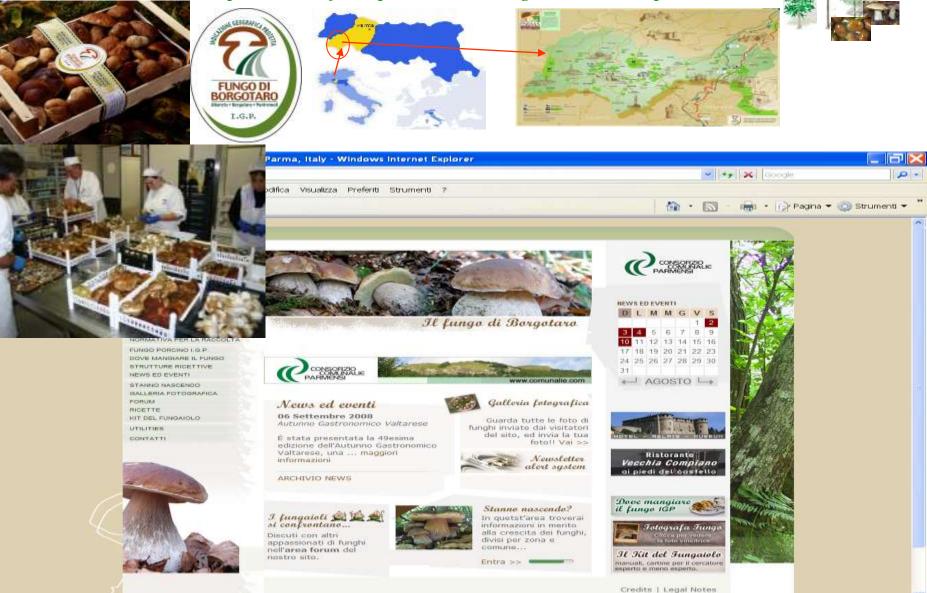
**CORK STOPPERS** 

ISO 4711:1987 ISO 7322:2000 UNI ... UNI ISO ... PDO Marrone di San Zeno
PDO Castagna Cuneo
PDO Farina di Neccio della Garfagnana
PGI Fungo di Borgotaro
PGI Nocciola del Piemonte
PGI Nocciola di Giffoni
PGI Castagna di Montella
PGI Marrone del Mugello
PGI Castagna del Monte Amiata
PGI Marrone di Castel del Rio

# **PGI Fungo di Borgotaro / 1:**

mushrooms (boletes): importance of cooperation among owners and pickers





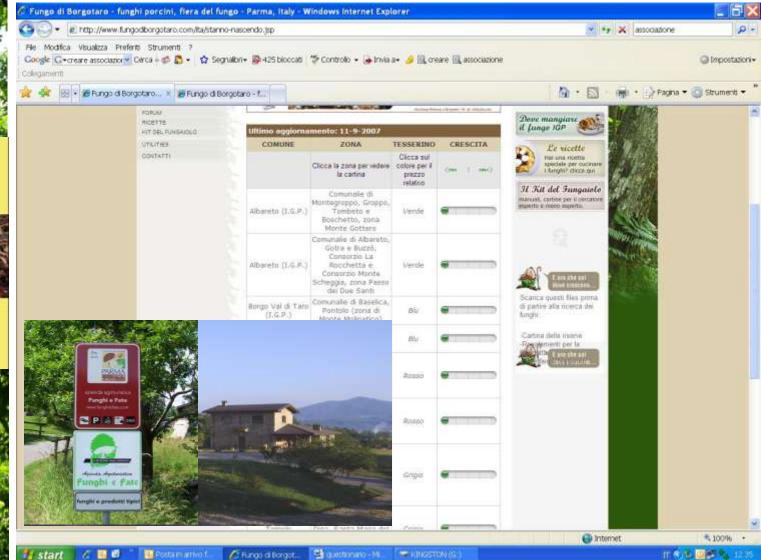
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#### PGI Fungo di Borgotaro / 2: mushrooms (boletes): importance of cooperation among tourism activities







# FOREST CERTIFICATION SCHEMES

(Council Resolution of 15 December 1998 on a Forestry Strategy for the European Union)



# market-based instruments which seek to:

- -improve consumer awareness of the environmental qualities of *sustainable forest management* and
- –promote the use of wood and *forest* products as environmentally friendly and renewable raw materials

# **PEFC SCHEMES**



(Identification and Traceability of WFPs/NWFPs from forest along chain) Chain of Custody (CoC)



PEFC



NEL RESPETTO DELL'EQUILIBRIO DEL BOSCO E DELLE SUE RISORSE PEFC IMPRESA BOSCHIVA DE LUCA ELIO VENDITA LEGNA DA ARDERE Azienda certificato PEFC/18-32-01/01 Anaana di Cappella Maggiore (TV) 2-31012 Via Savalian, 26 tel/fax: 0438/55 55:01

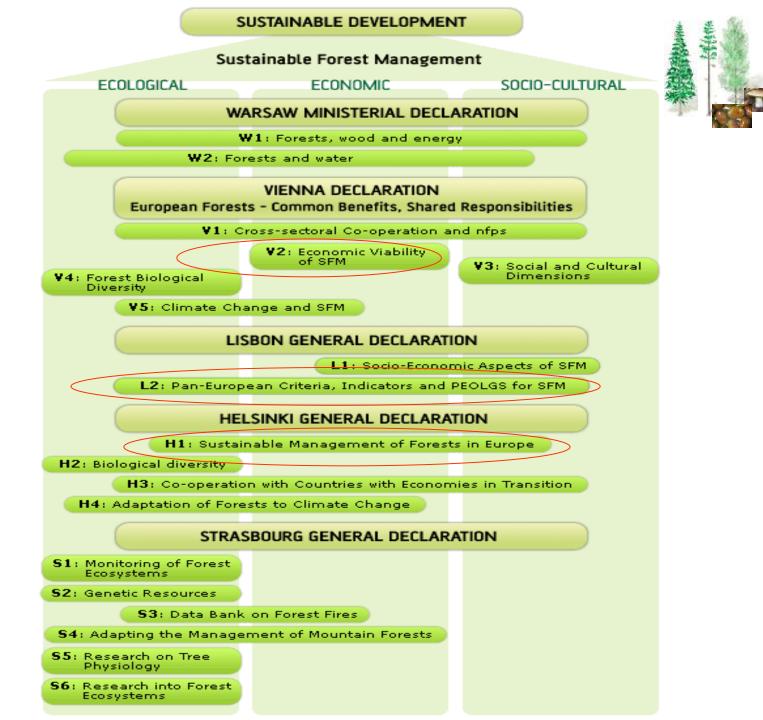
a undurte

SONO COTTE CON LEGNA PROVENZENTE DA BOSCHI

IN FORMA SOSTENIBILE

QUESTE GRIGLIATE

GESTITI



# SFM, NWFPs and MCPFE - Helsinki 1993 (Resolution H1)



H/I. Noting that the report 'The Forest Resources of the Temperate Zones' (the UN-ECE/ FAO 1990 Forest Resource Assessment) shows that the European forest resource is continuing to expand in terms of area, standing volume and increment, and that the <u>demand</u> for non-wood products and services is <u>increasing</u> in absolute and relative <u>importance</u>,

# **PART I: GENERAL GUIDELINES**

11. Because of the expanding European forest resource, the <u>use of</u> wood and <u>non-wood</u> forest <u>products should be encouraged</u> on a basis compatible with the <u>sustainable management</u> of forests, thereby providing and increasing the <u>potential</u> for <u>traditional</u> and <u>new</u> forest <u>products</u>, sales of which can provide, for both the owner and society, a ready <u>means of financing</u> forest management.

# SFM, NWFPs and MCPFE - Lisbon 1998

(Annex 2 of the Resolution L2 Pan-European Operational Level Guidelines for Sustainable Forest Management)



# **CRITERION 3.** Maintenance and encouragement of productive functions of forests (wood and non-wood)

# **3.1 Guidelines for Forest Management Planning**

a. Forest management planning should aim to maintain the capability of forests to produce a range of wood and **non-wood forest products** and services on a sustainable basis.

# **3.2 Guidelines for Forest Management Practices**

c. Harvesting levels of both wood and **non-wood forest products** should not exceed a rate that can be sustained in the long term, and optimum use should be made of the harvested forest products, with due regard to nutrient offtake.

**SFM, NWFPs and MCPFE - Vienna 2002** *IMPROVED PAN-EUROPEAN QUANTITATIVE INDICATORS for SUSTAINABLE FOREST MANAGEMENT* 



#### 1. QUANTITATIVE INDICATORS

Criteria	No.	Indicator	Full text
C 1: Maintenance and Appropriate Enhancement of Forest Resources and their Contri- bution to Global Carbon Cycles	1.1	Forest area	Area of forest and other wooded land, classified by forest type and by availability for wood supply, and share of forest and other wooded land in total land area
	1.2	Growing stock	Growing stock on forest and other wooded land, classified by forest type and by availability for wood supply
	1.3	Age structure and/or diameter distribution	Age structure and/or diameter distribution of forest and other wooded land, classified by forest type and by availability for wood supply
ŕ	1.4	Carbon stock	Carbon stock of woody biomass and of soils on forest and other wooded land
C 2: Maintenance	2.1	Deposition of air pollutants	Deposition of air pollutants on forest and other wooded land, classified by N, S and base cations
of Forest Ecosys- tem Health and	2.2	Soil condition	Chemical soil properties (pH, CEC, C/N, organic C, base saturation) on forest and other wooded land related to soil acidity and eutrophication, classified by main soil types
Vitality	2.3	Defoliation	Defoliation of one or more main tree species on forest and other wooded land in each of the defoliation classes "moderate", "severe" and "dead"
	2.4	Forest damage	Forest and other wooded land with damage, classified by primary damaging agent (abiotic, biotic and human induced) and by forest type
C 3: Maintenance and Encourage-	3.1	Increment and fellings	Balance between net annual increment and annual fellings of wood on forest available for wood supply
ment of Productive Functions of For-	3.2	Roundwood	Value and quantity of marketed roundwood
ests (Wood and	3.3	Non-wood goods	Value and quantity of marketed non-wood goods from forest and other wooded land
Non-Wood)	3.4	Services	Value of marketed services on forest and other wooded land
	3.5	Forests under management plans	Proportion of forest and other wooded land under a management plan or equivalent
C 4: Maintenance, Conservation and	4.1	Tree species composition	Area of forest and other wooded land, classified by number of tree species occurring and by forest type
Appropriate En- hancement of	4.2	Regeneration	Area of regeneration within even-aged stands and uneven-aged stands, classified by regeneration type

# **CoC PEFC for RAW and PROCESSED NWFPs**





to <u>PEFCC 2002:2010</u>: Chain of Custody of Forest Based Products – Requirements Appendix 8 (approved by PEFC Council General Assembly on 27 October 2006): PEFC Council specification for the origin for the purposes of PEFC label and declarations for <u>non wood forest</u> products



**SFM, NWFPs and MCPFE - Vienna 2002** *IMPROVED PAN-EUROPEAN <u>QUALITATIVE</u> INDICATORS for SUSTAINABLE FOREST MANAGEMENT* 



#### 2. QUALITATIVE INDICATORS

#### A. Overall policies, institutions and instruments for sustainable forest management

- A.1 National forest programmes or similar
- A.2 Institutional frameworks
- A.3 Legal/regulatory frameworks and international commitments
- A.4 Financial instruments/economic policy
- A.5 Informational means

#### B. Policies, institutions and instruments by policy area

Ind. Crit. Policy area		Policy area	Main ob-	Relevant	Main policy instruments used			Signific. changes
No.			jectives	institutions	Legal/ regulatory	Financial/ economic	Informa- tional	since last Minis- terial Conference
B.1	C1	Land use and forest area and OWL <sup>2</sup>						
B.2	C1	Carbon balance						
B.3	C2	Health and vitality						
B.4	C3	Production and use of wood						
B.C	C3	Production and use of non-wood goods and services, provision of especially recreation						
B.6	C4	Biodiversity						
B.7	C5	Protective forests and OWL						
B.8	C6	Economic viability						
B.9	C6	Employment (Incl. safety and health)						
B.10	C6	Public awareness and participation						
B.11	C6	Research, training and education						
B.12	C6	Cultural and spiritual values						

<sup>&</sup>lt;sup>2</sup> OWL - other wooded land

# SFM, NWFPs and MCPFE Vienna - 2003

Resolution V2 - Commitments



V2/9. improve enabling conditions for the <u>market-based</u> provision of a <u>diversified</u> range of <u>non-wood goods</u> and services from <u>sustainably managed forests</u>, inter alia, through identifying and removing unintended impediments and setting appropriate incentives,

V2/11. enhance the competitiveness of the forest sector by promoting innovation and entrepreneurship among all relevant stakeholders, notably for the <u>efficient</u> provision of <u>new</u> and <u>improved</u> wood and <u>non-wood goods</u> and services,

# S.F.M., NWFPs and PEFC ITALIA/1

(standard ITA 1001-1: individual and group level)



#### **Indicator 3.1b** Contents of the local forest planning COMPULSORY INDICATOR MEASURING PARAMETERS:

Reference within the forest management plan, or its equivalent at company, inter-company level or at higher planning level, regarding indicator

3.1.a or in the current legislation, of guidelines concerning:...

• the methods for undertaking silvicultural operations, considering grazing and rights of use, as well as management activities connected to the production of **non-timber** products and recreational services (when these activities occur in the area under consideration);... *CRITICAL THRESHOLD:* 

Presence and respect of measuring parameters.

#### AREAS FOR IMPROVEMENT:

Supporting local forest planning through accurate and up-to-date inventories and mapping instruments.

#### **EXAMPLES OF DATA SOURCES AND INFORMATION GATHERING:**

Forest management plans or equivalent planning tools at enterprise, inter enterprise or at a higher planning level.

# S.F.M., NWFPs and PEFC ITALIA/2

(standard ITA 1001-1: individual and group level)



# **Indicator 3.2a Quantity of forest products and services.** *DESCRIPTIVE INDICATOR*

**MEASURING PARAMETERS**:

•List of forest products (e.g. wood, game, chestnuts, truffles, berries, medicinal plants, cork, mushrooms): \_\_\_\_\_\_.

•...
•Number of annually issued picking/harvesting licences/permits for (indicate the applicable non-timber product) \_\_\_\_\_, over the last no. \_\_\_\_\_ years: \_\_\_\_.

### •Percentage of forest surface within the enterprise allocated for game:

#### AREAS FOR IMPROVEMENT:

•

Production of timber and non-timber benefits should not decrease over time, if compatible with the socio - economical and environmental protection conditions.

Collection of information on goods and services produced by forest in planning and forestry administration at enterprise and group organization level shall be enhanced.

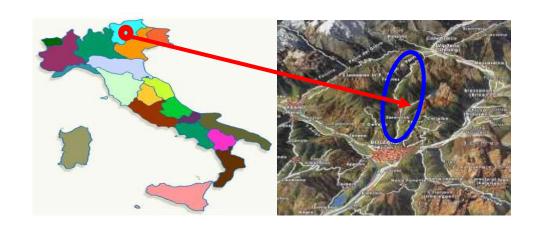
#### **EXAMPLES OF DATA SOURCES AND INFORMATION GATHERING:**

Local forest inventory; forest management plan or equivalent tool at enterprise, inter-enterprise a or at a higher planning level; documents issued by the regional forest services; specific research and local studies; interviews; enterprise administrative documentation.

#### MUGO PINE in VAL SARENTINO / 1 :

Raw material from SFM certified stands







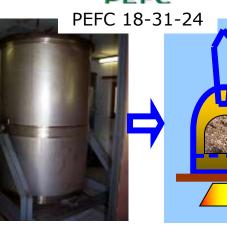
#### MUGO PINE in VAL SARENTINO / 2:

#### Raw material processed as essential oil (mugolio) in CoC certified















# MUGO PINE in VAL SARENTINO / 3 :

from wood through "organic certified" cosmetics and wellness centre ...











# MUGO PINE in VAL SARENTINO / 4 :

... to food and innovative dishes from appetizers to desserts













# MUGO PINE in VAL SARENTINO / 4 :

### ... to food and traditional and innovative products





# MUGO PINE in VAL SARENTINO / 5 :

"mugo pine path and museum" within the tradition





# MUGO PINE in VAL SARENTINO / 6 :

with mugo pine local economy will never walk alone: work in sinergy for a success

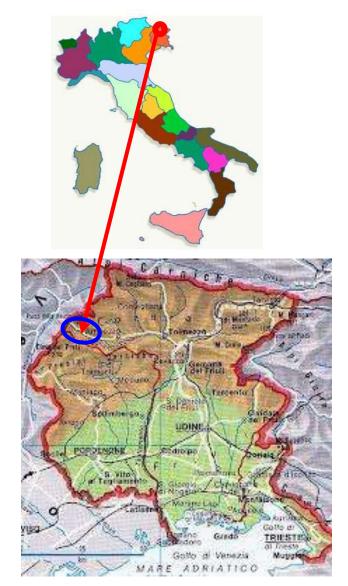




**Italian Brewmaster of the year 2011 / 1 :** 

CoC PEFC certified beer flavored with buds of Mugo pine and needles of Scots pine







### **Beer flavored Mugo and Scots pine / 2 :** from local SFM PEFC certified stands to CoC certified NWFP beer ingredients





### **Beer flavored Mugo and Scots pine / 3**:

into the brewing to final products (prized by Unionbirrai Haraban Gold Medal Beer of 2012 – Class 4)







# **Beer flavored Mugo and Scots pine / 4 :**

not only sold into the own pub and hotel/restaurant ...





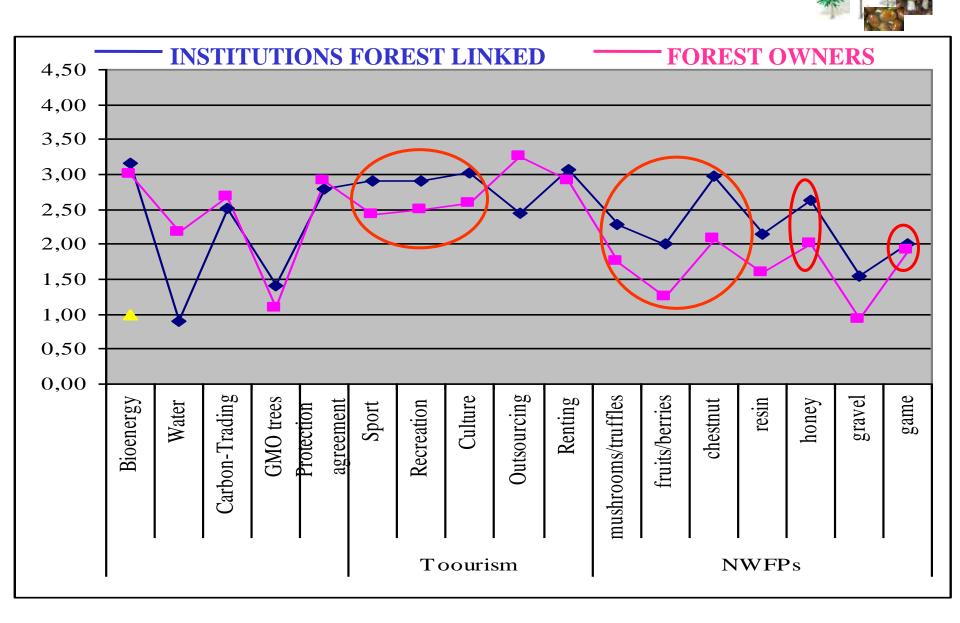


# White truffle PEFC certified



**NWFPs and Tourism in Trentino-Italy** 

The Opinion of Forest Owners and Forest-linked Institutions



# Lessons learnt



- Think long term and dare to take strategic choices in order or to integrate either to increase income/profit of the firm
- Establish tactical partnerships with different actors not only linked to forestry chain
- Collaborate with those above actors
- Preferably join an association or union helps to lead new markets and to reach efficiently to the effective information to identify innovative processing techniques and processed products (adding value function) needed by different consumers/customers/ clients (knowledge of the markets)
- Diversify products in order to deseasonalise selling period and meet the most diversified consumers/customers/clients
- Qualify products through services
- Ensure and enhance quality of the products (and services linked) also through certification of the sustainable management of forest originating NWFPs assuring the traceability along the manifold chains/actors processing it



# Thank you for your attention

Antonio BRUNORI info@pefc.it